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EXAMINER

ABDI, AMARA

ART UNIT	PAPER NUMBER
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2624

NOTIFICATION DATE	DELIVERY MODE
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10/16/2007

ELECTRONIC

See find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/764,335	Applicant(s) STEINBERG ET AL.	
	Examiner Amara Abdi	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :09/28/2004
09/28/2004
09/30/2004.

DETAILED ACTION

1. Applicant's response to the last office action, filed July 17, 2007 has been entered and made of record.
2. In view of the Applicant amendments, the objection to the specification is expressly withdrawn.
3. In view of the Applicant amendments, the objections to the claims 1-48 are expressly withdrawn.
4. In view of the Applicant amendments, the rejection to the claims 1-14 and 17-32 under 35 USC 112, second paragraph is expressly withdrawn.
5. In view of the Applicant amendments, the rejection to the claims 1-48 under 35 USC 101 is expressly withdrawn.
6. Applicant's arguments with respect to claims 1-48 and a the added new claims 49-60 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 53,55, and 57-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(A) In each of claims 53,55, and 57, "separation of eyes, nose, or mouth, or combination thereof" is introduced in claims but it's not described in the specification. Therefore, it is considered as a new matter.

(B) In each of claims 58,59, and 60, "the normalized face regions are first normalized with respect to pose, and then with respect to orientation, and then with respect to size" is introduced in the claims, but was not described in the same order in the specification. Therefore it is considered as a new matter.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-13,15-17,22-43, and 45-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. (US 6,418,235) in view of Nicponski (US-PGPUB 2003/0128877).

(1) Regarding claim 1:

As shown in figure 4, Morimoto et al. disclose one or more processor-readable media having stored thereon processor-readable code (column 3, line 20-22) including a database of face print data corresponding to detected face regions within images

acquired (column 1, line 10-11) with an image acquisition device (13 in figure 1, column 3, line 4) and digitally-stored (21 in figure 2, column 3, line 24-25) wherein the face print image data are stored within the media for access by processor (column 3, line 23-25) comprises:

(a) an image data component including acquired digital image data including content data and unique identifiers corresponding to individual acquired digital images or face regions therein, or both; (column 1, line 47-49), (the extracted means is read as the image data component);

(b) an identity data component including an identification listing of known identities to which identified face regions detected within the acquired digital image data have been determined to correspond; (column 1, line 45-47), (the storage means is read as the identity data component);

(c) a face recognition data component, comprising for an individual known identity (column 1, line 49-54), (the collation means is read as the face recognition data component):

(i) an appearance table including one or more identity entries for the known identity, (column 3, line 59-61), (the examiner interpreted that the table of figure 3, comprises an appearance characteristics corresponding to the identities entries);

(ii) one or more identity tables corresponding to the one or more identity entries in the appearance table (column 3, line 59-60), (the given name is read as the identity entries);

(iii) one or more face class tables corresponding to one or more face class entries of the one or more identity tables, where each face class table comprises one or more face print image entries corresponding to face prints (column 3, line 47-48; and column 3, line 56-59).

Morimoto et al. do not explicitly mention the normalizing of face regions, comprising spatially normalized face region, which are normalized with respect to size, orientation or pose, or luminance normalized face region, or combination thereof.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where normalizing the face regions (paragraph [0108], line 13-14), comprising spatially normalized face region (paragraph [0123], line 1-3), with respect to the size (paragraph [0123], line 1) and luminance normalized face region (paragraph [0168], line 3-4), (the intensity normalization is read as luminance normalized face region).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nicponski, where normalizing a face regions, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(2) Regarding claim 17:

As shown in figure 4, Morimoto et al. disclose one or more processor-readable media having stored thereon processor-readable code (column 3, line 20-22) including a database of face print data corresponding to detected face regions within images acquired (column 1, line 10-11) with an image acquisition device (13 in figure 1, column 3, line 4) and digitally-stored (21 in figure 2, column 3, line 24-25) wherein the face print image data are stored within the media for access by processor (column 3, line 23-25) comprises:

(a) an image data component including acquired digital image, or a pointer to the location of said image (column 1, line 47-49), (the extracted mean is read as the image data component), and additional data associated with said image (column 1, line 48), (the additional data is read as an attribute data) including content data (column 3, line 50-52), (the examiner interpreted the face data as content data) and unique identifiers (column 3, line 44-46), (the personal data is read as unique identifier, such as a given name of person to be registered and registration item) corresponding to the acquired digital images or face regions therein, or both, and wherein the image data component further comprises an image list of the acquired digital image data (column 4, line 13-17), (the list of acquired digital image data is read as the attribute data);

(b) an identity data component including an identification listing of known identities to which identified face regions detected within the acquired digital image data have been determined to correspond (column 1, line 45-47), (the storage means is read as the identity data component);

(c) a face recognition data component, comprising for an individual known identity (column 1, line 49-54), (the collation means is read as the face recognition data component):

(i) one or more identity tables corresponding to one or more identity entries (column 3, line 3, line 48-50), (the examiner interpreted that the table of figure 3 has the identity characteristics corresponding to the identity entries).

(ii) one or more face class tables corresponding to one or more face class entries of the one or more identity tables, wherein each face class table comprises one or more faceprint entries (Column 3, line 56-67), (the examiner interpreted that table of figure 3 has the face class table corresponding to face class entries of the identity table).

Morimoto et al. do not explicitly mention the normalizing of face regions, comprising spatially normalized face region, which are normalized with respect to size, orientation or pose, or luminance normalized face region, or combination thereof.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where normalizing the face regions (paragraph [0108], line 13-14), comprising spatially normalized face region (paragraph [0123], line 1-3), with respect to the size (paragraph [0123], line 1) and luminance normalized face region (paragraph [0168], line 3-4), (the intensity normalization is read as luminance normalized face region).

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to use the system of Nicponski, where normalizing a face regions, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(3) Regarding claim 34:

As shown in figure 4, Morimoto et al. disclose one or more processor-readable media having stored thereon processor-readable code (column 3, line 20-22) including a database of face print data corresponding to detected face regions within images acquired (column 1, line 10-11) with an image acquisition device (13 in figure 1, column 3, line 4) and digitally-stored (21 in figure 2, column 3, line 24-25) wherein the face print image data are stored within the media for access by processor (column 3, line 23-25) comprises:

(a) an image data component including acquired digital image data including content data and unique identifiers corresponding to individual acquired digital images or face regions therein, or both; (column 1, line 47-49), (the extracted means is read as the image data component);

(b) an identity data component including an identification listing of known identities to which identified face regions detected within the acquired digital image data have been determined to correspond (column 1, line 45-47), (the storage means is read as the identity data component);

(c) a face recognition data component, comprising for an individual known identity (column 1, line 49-54), (the collation means is read as the face recognition data component):

(i) one or more identity tables corresponding to one or more identities, wherein each identity table comprises one or more face class entries each defined by values of one or more face classifier parameters (figure 3, column 3, line 44-46), (the examiner interpreted the table of figure 3 as the combination of identity table and face class entries)

(ii) one or more face class tables corresponding to the one or more face class entries of the one or more identity tables, wherein each face class table comprises one or more faceprint image entries corresponding to faceprints from the acquired digital image data. (Column 3, line 50-52), (the examiner interpreted that the table of figure 3 comprises face class table which comprises face print image entries).

Morimoto et al. do not explicitly mention that the identified face regions comprise spatially normalized face region, which are normalized with respect to size, orientation or pose, or luminance normalized face region, or combination thereof.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where the identified face regions comprises spatially normalized face region (paragraph [0123], line 1-3), with respect to the size (paragraph [0123], line 1) and luminance normalized face region (paragraph

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[0168], line 3-4), (the intensity normalization is read as luminance normalized face region).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nicponski, where normalizing a face regions, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(4) Regarding claims 2 and 35:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the image data component further comprises an image list of the acquired digital image data (column 4, line 13-17), (the list of acquired digital image data is read as the attribute data).

(5) Regarding claims 3 and 22:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where at least one group of image data comprises a face region list including one or more entries each corresponding to an identified face candidate region within an acquired digital image (column 3, line 28-30).

(6) Regarding claims 4 and 23:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the face region list further including one or more links, corresponding to the one or more entries, to one or more known identities within the

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identification listing of the identity data component (column 4, line 49-53), (the known identity within the identification listing is read as a personal identification such address).

(7) Regarding claims 5 and 24:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the image data component further comprises multiple tables of image classification categories to which the image data are determined to belong (figure 3, column 3, line 43-55), (the examiner interpreted that the table of figure 3, has the combination of multiple tables of image classification in one table).

(8) Regarding claims 6 and 25:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the image data component further comprises a set of database links to the tables of image classification categories (column 4, line 64-65), (the set of database is read as the attribute data set to the image data).

(9) Regarding claims 7, 26, and 36:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the known identities correspond to handles identifying a known person (column 4, line 18-26), (the body type data, sexuality data, and age group data are read as a known identities stored in the storage, which are corresponding to the registered person or known person).

(10) Regarding claims 8, 27, and 37:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the identity data component further comprises database links to

face recognition data of the face recognition component (figure 3, column 3, line 50-55), (it is read that the identity data comprises links to face recognition data in table of figure 3).

(11) Regarding claims 9,28, and 38:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the identity data component further comprises one or more database links to personal data associated with one or more known identities (figure 3, column 3, line 48-50), (the known identity is read as the given name of the registered person and has a link to personal data in table of figure 3).

(12) Regarding claims 10,29, and 39:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the identity data component comprises a table of personal data associated with a known identity (see table of figure 3), (the personal data is read as an attribute data which is associated with known identity).

(13) Regarding claims 11,31, and 41:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the identity data component further comprises a set of links to a relationship list or a group membership list or both (figure 3, column 3, line 45-46), (it is read that the registration number is related to a group membership or list membership).

(14) Regarding claims 12 and 33:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where each identity table comprises one or more face class entries each

defined by values of one or more face classifier parameters (see table of figure 3), (the face data is read as face class entries which is define by one or more of contour line, and an area).

(15) Regarding claims 13 and 43:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where at least two identity entries are characterized separately due to at least one distinguishing appearance characteristic (figure 4, step n3, column 4, line 15-16), (in step n4, it is read that the attribute data includes the body type data, which is interpreted as one of the distinguishing appearance that can make difference between two identities entries).

(16) Regarding claims 15 and 45:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the appearance table comprises a list of links to one or more identity tables associated with distinct appearances determined for the known identity (figure 3, column 3, line 50-55), (the distinct appearance is read as the body type which is associated to the identity of the person to be registered).

(17) Regarding claims 16 and 46:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the one or more identity tables further comprise one or more links corresponding to the one or more face class tables (figure 3, column 3, line 46-48), (it is read that the one or more identity data in the table such as given name or ID, has a link to the face data in the table such as eyes, and position of nose).

(18) Regarding claims 30 and 40:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the personal data comprises full name, one or more address, one or more phone numbers, one or more email address, one or more web address, or combination thereof (table of figure 3, column 3, line 44-45 and line 48-50).

(19) Regarding claims 32 and 42:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the relationship list comprises data on relationships between the known identity and other identities named within the database, and wherein the group membership list comprises data on grouping of known identities based on family ties, hobbies, interests, group memberships, interpersonal relationships, or combinations thereof (Table of figure 3, column 3, line 52-55 and line 61-67).

(20) Regarding claim 47:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where the one or more face class tables comprises one or more of the previously determined value range of the one or more face classifier parameters (Figure 3, column 3, line 44-46), (it is read that the table of figure 3 comprises a face class table which includes a value range of face parameter).

(21) Regarding claim 48:

Morimoto et al. further disclose one or more processor-readable media (column 3, line 20-22), where each value range is uniquely associated with the identified and user confirmed face region detected within the acquired digital image (column 1, line 47-

49), (it is read that the value range in the table of figure 3 is associated with the identified face region detected within the acquired digital image).

(22) Regarding claims 49,50, and 51:

Morimoto et al. disclose one or more processor-readable media (column 3, line 20-22) as described in claims 1,17, and 34 above.

Morimoto et al. do not explicitly mention the system, where the normalized face regions are normalized prior to extracting face classifier parameters therefrom.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where the normalized face regions are normalized (paragraph [0123], line 1-3) prior to extracting (paragraph [0033], line 1-5) face classifier parameters (paragraph [0034], line 1-6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nicponski, where normalizing a face regions prior to extracting face classifier parameters, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(23) Regarding claims 52,54, and 56:

Morimoto et al. disclose one or more processor-readable media (column 3, line 20-22) as described in claims 1,17, and 34 above.

Morimoto et al. do not explicitly mention the system, where the normalized face regions are normalized with respect to size.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where the normalized face regions are normalized (paragraph [0123], line 1-3) with respect to size (paragraph [0123], line 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nicponski, where normalizing a face regions with respect to the size, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(24) Regarding claims 53,55, and 57:

Morimoto et al. disclose one or more processor-readable media (column 3, line 20-22) as described in claims 52,54 and 56 above.

Morimoto et al. do not explicitly mention the system, where the normalized face regions are normalized with respect to a standard size based on separation of eyes, nose or mouth, or combination thereof.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where the normalized face regions are normalized (paragraph [0123], line 1-3) with respect to standard size (paragraph [0123], line 1) based on separation of eyes, nose, or mouth (paragraph [0125], line 1-3), (the sub-region size which contains facial features is read as the same concept as the separation of eyes, nose, or mouth).

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to use the system of Nicponski, where normalizing a face regions based on separation of eyes, nose, or mouth, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects, attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

(25) Regarding claims 58,59, and 60:

Morimoto et al. disclose one or more processor-readable media (column 3, line 20-22) as described in claims 1,17, and 34 above.

Morimoto et al. do not explicitly mention the system, where the normalized face regions are normalized with respect to pose, and then with respect to orientation, and then with respect to size.

Nicponski, in analogous environment, teaches a method and system for processing images for themed imaging services, where the normalized face regions are normalized (paragraph [0123], line 1-3) with respect to pose (paragraph [0130], line 1-3), and then with respect to orientation (paragraph [0048], line 6-10), and then with respect to size (paragraph [0123], line 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nicponski, where the normalized face regions are normalized with respect to pose, and then with respect to orientation, and then with respect to size, in the system of Morimoto et al. in order to processes a digital image to recognize and thereby assign useful meaning to human understandable objects,

attributes or conditions and then to utilize the results obtained in the further processing of the digital image (paragraph [0183], line 4-7).

11. Claims 14 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. and Nicponski, as applied to claims 13 and 43 above, and further in view of Lee et al. (7,092,555).

Morimoto et al. and Nicponski disclose all the subject matter as described in claims 13 and 43 above.

Morimoto et al. and Nicponski do not explicitly mention the one or more processor-readable media, where the appearance characteristic is distinguished as determined from a sufficient difference in value of at least one face classifier parameter between faceprints and associated normalized face region determined to correspond to the same known identity, or based on user input, or both.

Lee et al., in analogous environment, teaches a system for registering and authenticating human face, where the appearance characteristic is distinguished (column 6, line 13-17) as determined from a sufficient difference in value of at least one face classifier parameter (column 4, line 62-63) between faceprints and associated normalized face region (column 4, line 57-61) determined to correspond to the same known identity (column 8, line 24-30).

It would have obvious to one having ordinary skill in the art at the time the invention was made to use the system of Lee et al., where the appearance characteristic is distinguished, in the system of Morimoto et al. in order to improve the

authentication performance as readily distinguishable feature information is used, and the time for face authentication is reduced as face authentication is performed by using the optimal set of readily distinguishable features at a training step (column 9, line 22-28).

12. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. and Nicponski, as applied to claim 17 above, and further in view of Van Zee (US-PGPUB 2003/0156202).

Morimoto et al. and Nicponski disclose all the subject matter as described in claim 17 above.

Morimoto et al. and Nicponski do not explicitly mention the system, where the one or more groups of image data include image metadata including acquisition device specific information associated with acquisition or normalization, or both, of face region corresponding to a group of image data and its associated parent image.

Van Zee, in analogous environment, teaches automatically processing digital assets of a digital camera, where one or more groups of image data include image metadata (paragraph [0029], 3-4), which include specific information of face region associated with normalization (paragraph [0029], line 1-4).

It would have obvious to one having ordinary skill in the art at the time the invention was made to use the system of Van Zee, where extracting data and metadata of files, in the system of Morimoto et al. in order to make the captured image accessible by the operating system of the device in the form of file system in which the captured

image and metadata are organized in camera specific collection of files and directories, so the user doesn't have to connect to camera to the computer or another device (paragraph [0010], line 17-21).

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al., Nicponski, and Van Zee, as applied to claim 18 above, and further in view of Matraszek et al. (US-PGPUB 2003/0122839).

Morimoto et al., Nicponski, and Van Zee disclose all the subject matter as described in claim 18 above.

Morimoto et al., Nicponski, and Van Zee do not explicitly mention the system, where the metadata information comprise focal length of a lens coupled with a digital camera at time of image acquisition, focusing distance of the lens at time of acquisition, or effective digital camera sensor size, or combination thereof.

Matraszek et al., in analogous environment, teaches an image format including affective information, where the image metadata comprises the focal length of a lens coupled with the digital camera (paragraph [0094], line 5-11) and focusing the digital sensor size (paragraph [0053], line 4-7).

It would have obvious to one having ordinary skill in the art at the time the invention was made to use the system of Matraszek et al., where the metadata information comprise focal length, in the system of Morimoto et al. in order to make a use of effective information to classify a user's reaction to digital images (paragraph [0012], line 1-3).

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. and Nicponski, as applied to claim 17 above, and further in view of Takaragi et al. (US 6,400,470).

Morimoto et al. and Nicponski disclose all the subject matter as described in claim 17 above.

Morimoto et al. and Nicponski do not explicitly mention the system, where the one or more image data groups include additional image data with circumstances of acquisition of a parent image and associated face region corresponding to the group of image data.

Takaragi et al., in analogous environment, teaches an apparatus and method for processing images, where the image data groups include additional image data associated with the pattern and face region corresponding to the group of image data (column 3, line 16-21), (the pattern is read as a parent image).

It would have obvious to one having ordinary skill in the art at the time the invention was made to use the system of Takaragi et al., where the image group includes a parent image and associated face region corresponding to the group of image data, in the system of Morimoto et al. in order to detect the pattern that is less visible or invisible to the eyes by a device with high accuracy (column 1, line 60-62).

15. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al., Nicponski, and Takaragi et al., as applied to claim 18 above, and further in view of Okusa (US-PGPUB 2003/0158838).

Morimoto et al., Nicponski, and Takaragi et al. disclose all the subject matter as described in claim 18 above.

Morimoto et al., Nicponski, and Takaragi et al. do not explicitly mention that the circumstances comprising location of image acquisition, date and time of image acquisition, type of image acquisition device, or any post-capture image processing including red eyes correction or luminance correction, or combination thereof.

Okusa, in analogous environment, teaches an image processing apparatus, comprising location of image acquisition (paragraph [0050], line 33-34), date (paragraph [0050], line 30-31) and time (paragraph [0050], line 17) of image acquisition, type of image acquisition device (paragraph [0050], line 4-5).

It would have obvious to one having ordinary skill in the art at the time the invention was made to use the system of Okusa, where the image processing apparatus comprises location of image acquisition, date and time of image acquisition, type of image acquisition device, in the system of Morimoto et al. in order to eliminate the labor required to enter a keyword for retrieving image data, and that can reduce the time needed to prepare retrieval data (paragraph [0014], line 3-5).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information:

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi
10/09/2007

JINGGE WU
SUPERVISORY PATENT EXAMINER

